

REMARKS

By this amendment, claims 1, 2 and 5 have been amended and claim 3 has been canceled. New claim 6 has been added. No new matter has been introduced. Accordingly, claims 1, 2 and 4-6 remain pending in this application. Favorable reconsideration of this application, as presently amended and in light of the following discussion, is respectfully requested.

The specification is objected to because of the following informalities: the "light selecting means" as stated in claims 1 and 5 has not been described in the specification.

The term "light selecting means" has been changed in the claims to "wave limitation device" and further, the specification has been amended to point out that the set of wavelength selective filters 17 and 18 shown in Figures 2, 3, and 4 are an example of a wave limitation device as recited in the claims. Accordingly, Applicants submit that Examiner's objection to the specification has been overcome.

The drawings are objected to under 37 CFR 1.83(a) for not showing the feature "light selecting means".

The term "light selecting means" has been changed in the claims to "wave limitation device" and further, the specification has been amended to point out that the set of wavelength selective filters 17 and 18 shown in Figures 2, 3, and 4 are an example of a wave limitation device as recited in the claims. Accordingly, Applicants submit that Examiner's objection to the drawings has been overcome.

Claims 1 - 5 are rejected under 35 U.S.C. § 112, first paragraph, as failing to comply with the enablement requirement.

In this case, the light selecting means has not been described in the specification.

By this amendment, the term "light selecting means" in claims 1 and 5 has been modified to the term "wave limitation device". Further, the specification has been amended to point out that the set of wavelength selective filters 17 and 18 described therein (see pages 6 -11) and shown in Figures 2, 3, and 4, are an example of a wave limitation device as recited in the claims. Accordingly, Applicants respectfully submit that this rejection has been overcome.

Claim 1 is rejected under 35 U.S.C. § 102(e) as being anticipated by Lee, et al. (US 20040208230A1, hereinafter "Lee").

Applicants respectfully traverse this rejection.

In the description of FIG. 2A, paragraph [0036] of Lee clearly describes infrared radiation detecting means 21 for receiving and sensing infrared radiation signals and a visible light detecting means 22 for receiving and sensing visible light signals. Lee further states that infrared radiation detecting means 21 may be an infrared detection thermometer and visible light detecting means 22 may be a CCD and/or a CMOS sensor. Analogously, Fig. 3A also illustrates two detecting devices 33 and 34. Accordingly, it is clear that Lee's inventive concept employs two distinct detectors.

In contrast, in the present application the image is obtained by a single detecting means, which is the single CCD image sensor 10 (claim 6).

Therefore, Applicants respectfully submit that present claim 1 is not anticipated by Lee, for at least the reasons given above.

Claims 1 - 3 are rejected under 35 U.S.C. § 102(b) as being anticipated by Fontenot, et al (U.S. 5910816), hereinafter "Fontenot").

Applicants respectfully traverse this rejection.

In the description of FIG. 1, Fontenot clearly describes multiple CCD detectors 6 and 14. CCD color camera 6 is secured to the right vertical surface of prism 2, while a second, distinct CCD camera 14 described as a monochrome sensitive chip with high IR sensitivity is employed elsewhere. Accordingly, it is clear that Fontenot 's inventive concept employs two distinct CCD detectors.

In contrast, in the present invention the image is obtained by a single detecting means, which is the single CCD image sensor 10.

Therefore, Applicants respectfully submit that present claims 1 - 3 are not anticipated by Fontenot, for at least the reasons given above.

Claims 4 - 5 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Fontenot in view of Chen, et al. (US 20030227680, hereinafter "Chen").

As stated above, in the description of FIG. 1, Fontenot clearly describes multiple CCD detectors 6 and 14. CCD color camera 6 is secured to the right vertical surface of prism 2, while a second, distinct CCD camera 14 described as a monochrome sensitive chip with high IR sensitivity is employed elsewhere. Accordingly, it is clear that Fontenot 's inventive concept employs two distinct CCD detectors.

Further, this deficiency is not overcome by Chen, which reference is used merely to introduce the use of polarizing beam splitters.

Again, as stated above, in the present invention the image is obtained by a single detecting means, which is the single CCD image sensor 10. Therefore, Applicants respectfully submit that present claims 4 - 5 are patentable over the combination of Fontenot and Chen.

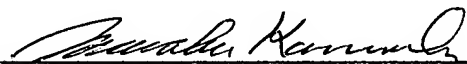
Applicants wish to further point out that the set of wavelength selective transmitting filters 17 and 18, i.e. the wave limitation device, is disposed adjacent to the light receiving surface to prevent cross talk due to stray light. Thus, in the present application, a design has been described which allows cross-talk to be prevented. This feature is a further advantage over the cited references.

Conclusions

In view of the amendments to the specification and claims and the remarks set forth above distinguishing the present Application from the cited references, Applicants submit that the Examiner's objections and rejections have been overcome. It is therefore respectfully requested that the Examiner withdraw the objections and rejections and allow the present claims.

Respectfully Submitted,

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